

Stratos-HSSD 2 Apollo APIC

Introduction

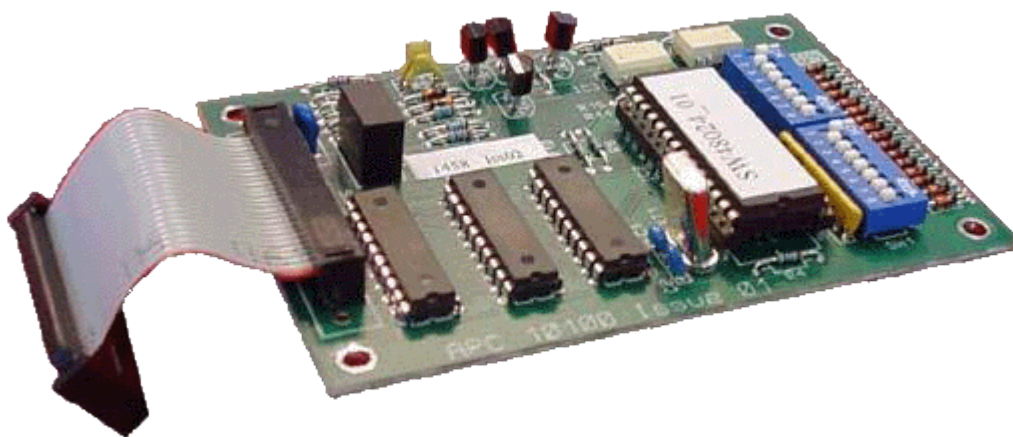
The Stratos-HSSD 2 range of detectors (including the Stratos-Micra and Command Module) has many interfacing options ranging from conventional, using the built in Alarm and Fault relays, to analogue addressable.

A range of Addressable Panel Interface Cards (APIC) is manufactured for these units that greatly eases the complexity of installation when connecting to an addressable loop. This application note explains how to install and configure the Apollo addressable protocol APIC part number 30430.

APIC cards plug into a connector on the main PCB provided for that purpose. To use the Apollo APIC all that is required is to plug the card into this connector using the ribbon cable attached to the interface, connect loop in and loop out to the main PCB addressable bus terminals and set the address DIP switches to the Apollo loop address.

Single address and multi address modes

The Apollo APIC has two distinct modes of operation; single address and multi address. When the interface is set to single address mode the card appears at a single address on the Apollo loop and the detector status is read from that address. Multi address mode is used when monitoring the status of multiple detectors with consecutive addresses from a single Apollo card. Multi address mode is normally only used in the Command Module.



Two DIP switches, SW1 and SW2, on the Apollo card enable the card to either respond as a single Apollo address, as it does in a detector, or a range of addresses, which is the way it is set up in the Command Module.

To set up an Apollo card in a detector, which only requires a single address (single address mode), set both switches to the required Apollo address. This sets the card to single address mode.

When the Apollo card is mounted in a Command Module (multi-address mode) then SW1 is set to the first loop address and SW2 is set to the last loop address. As an example if you have detectors 3 to 5 monitored by the Command Module then SW1 is set to 3 and SW2 is set to 5.

Note that there is no address translation between the detector address on the SenseNET loop and the address and the Apollo loop address; they are always the same.

Interface technical details

The APIC is powered from the detector or Command Module that it is installed in and takes no power from the Apollo loop, allowing 20 APICs to be used between Apollo isolators.

The interface uses the Series 90 protocol and is compatible with Series 90, XP95 and Discovery panels that support this protocol. It returns Optical Smoke as its type bit and returns the following status values.

The interface has been tested for compatibility by Apollo Fire Detectors Ltd and is approved for use on Apollo addressable loops. A test certificate, number 113 is available on request.

Condition	Analogue value
Fault	4
Normal	25
Aux	32
Pre-Alarm	48
Fire 1	64
Fire 2	127

Loop connections (on main PCB)

The loop in and loop out connections are made on the detector or Command Modules main PCB on the following connectors.

Apollo line	Connector
Loop in +	BUSH 1
Loop in -	BUSL 1
Loop out +	BUSH 2
Loop out -	BUSL 2